

CLAIM AMENDMENTS

Claims 1-19. (canceled)

1 20. (Currently Amended) An apparatus for downhole
2 drilling of wells comprising:

3 a drilling unit comprising a drill bit for penetrating
4 into a rock formation,

5 a motor arranged to drive the drill bit;

6 a tubing upon which the motor and the drilling unit are
7 suspended;

8 and

9 pumping means for drawing a ~~that causes the drilling~~
10 ~~fluid to flow~~ from an [[the]] annulus between the tubing and
11 [[the]] an inner surface of the borehole, and up through [[the]] a
12 bore of the tubing.

1 21. (Previously presented) An apparatus according to
2 claim 20 wherein the motor is an electric motor, and a cable means
3 is disposed along the tubing for energizing said motor.

1 22. (Currently amended) An apparatus according to claim
2 20 wherein the [[pump]] pumping means includes a pump disposed
3 downhole.

1 23. (Previously presented) An apparatus according to
2 claim 20 wherein the pump is an electric pump, and a cable means is
3 disposed along the tubing for energizing said motor.

1 24. (Currently amended) An apparatus according to claim
2 20 wherein the [[pump]] pumping means ~~include~~ includes at least
3 two pumps disposed downhole at different locations on the tubing.

1 25. (Previously presented) An apparatus according to
2 claim 22 wherein the [[pump]] pumping means includes a pump
3 disposed in the annulus upon the outer surface of the tubing.

1 26. (Previously presented) An apparatus according to
2 claim 22 wherein the [[pump]] pumping means includes a pump
3 disposed in the bore of the tubing.

1 27. (Currently amended) An apparatus according to claim
2 20 ~~including~~ , further comprising motor and drill bit monitoring
3 sensors which monitor [[the]] action of the motor and the drill
4 bit.

1 28. (Currently amended) An apparatus according to
2 claim 20 ~~including~~ , further comprising directional sensors which
3 monitor [[the]] position of the drill bit.

1 29. (Currently amended) An apparatus for downhole
2 drilling of wells comprising:

3 a drilling unit comprising a drill bit for penetrating
4 into a rock formation[[,]];

5 a motor arranged to drive the drill bit [[,]];

6 a tubing upon which the motor and the drilling unit are
7 suspended; and

8 pumping means [[that]]for causes causing the drilling
9 fluid to flow down through [[the]]a bore of the tubing, and up
10 through [[the]] an annulus between the tubing and [[the]] an
11 inner surface of the borehole,

12 the [[pump]] pumping means including a pump disposed
13 downhole.

14 30. (Previously presented) An apparatus according to
15 claim 29 wherein the motor is an electric motor, and a cable means
16 is disposed along the tubing for energizing said motor.

1 31. (Currently amended) An apparatus according to claim
2 29 wherein the [[pump]] pumping means is an electric pump, and a
3 cable means is disposed along the tubing for energizing said motor.

1 32. (Currently amended) An apparatus according to claim
2 29 wherein the [[pump]] pumping means includes a pump disposed in
3 the annulus upon [[the]] an outer surface of the tubing.

1 33. (Currently amended) An apparatus according to claim
2 29 wherein the [[pump]] pumping means includes a pump disposed in
3 the bore of the tubing.

1 34. (Currently amended) An apparatus according to claim
2 29, further comprising including motor and drill bit monitoring
3 sensors which monitor [[the]] action of the motor and drill bit.

1 35. (Currently amended) An apparatus according to claim
2 29, further comprising including directional sensors which monitor
3 [[the]] a position of the drill bit.

1 36. (Currently amended) A method [[for]] a downhole
2 drilling of wells comprising:

3 advancing a drill bit disposed on a tubing into a bore-
4 hole, the tubing having an inner flowpath , there being an annulus
5 between the tubing and the borehole, the inner flowpath and annulus
6 providing a circulation path from [[the]] a top of the borehole to
7 the drill bit and back to the top of the borehole,

8 driving the drill bit using a motor disposed upon the
9 tubing,

10 supplying the drill bit with drilling fluid through the
11 circulation path, and

12 causing said drilling fluid to flow down the annulus and
13 then up the tubing using pump means.

1 37. (Previously presented) A method according to claim
2 36 wherein the pump means includes a pump disposed in the annulus.

1 38. (Previously presented) A method according to claim
2 36 wherein the pump means includes a pump disposed in the bore of
3 the tubing.

1 39. (Previously presented) A method according to claim
2 36 wherein the pump means is an electric pump, and a cable means is
3 disposed along the tubing for energizing said pump.

1 40. (Previously presented) A method according to claim
2 36 wherein the pump means includes at least two pumps disposed
3 downhole at different locations on the tubing.

1 41. (Previously presented) A method according to claim
2 36 wherein the motor is an electric motor, and a cable means is
3 disposed along the tubing for energizing said motor.

1 42. (Currently amended) ~~An apparatus~~ The method
2 according to claim 36 including wherein motor and drill bit
3 monitoring sensors which ~~monitor~~ monitor ~~[[the]]~~ action of the motor and
4 drill bit.

1 43. (Currently amended) ~~An apparatus~~ The method
2 according to claim 36 including wherein directional sensors
3 ~~[[which]]~~ monitor the position of the drill bit.

1 44. (Currently amended) An apparatus for downhole
2 drilling of wells comprising:
3 a drilling unit comprising a drill bit for penetrating
4 into a rock formation ~~[[,]]~~ disposed on tubing,
5 a motor arranged to drive the drill bit,
6 thruster means disposed upon the tubing and which engage
7 with ~~[[the]]~~ an inner surface of the borehole to urge the tubing
8 downwards, and
9 a cable means ~~[[is]]~~ disposed along the tubing for
10 energizing said thruster means.

1 45. (Previously presented) An apparatus according to
2 claim 44 wherein the thruster means include at least two thruster
3 units disposed downhole at different locations on the tubing.

1 46. (Currently amended) An apparatus for downhole
2 drilling of wells comprising:
3 a drilling unit comprising a drill bit for penetrating
4 into a rock formation, disposed on tubing,
5 a motor arranged to drive the drill bit,

6 pumping means that causes the drilling fluid to flow from
7 [[the]] an annulus between the tubing and [[the]] inner surface of
8 the bore hole, and up through [[the]] a bore of the tubing,
9 formation sensors for determining characteristics of the
10 formation environment disposed upon the tubing, and
11 a cable means disposed along the tubing for energizing
12 said formation sensors.